WHAT IS CLAIMED IS:

1. A system comprising:

a first electrical device;

a second electrical device; and

a circuit configured to provide power to the first and second electrical devices;

wherein the circuit is configured to provide a first reversible voltage across the first electrical device using a first lead and a second lead, the circuit also being configured to use at least one of the first and second leads to provide a second voltage across the second electrical device;

wherein a polarity of the second voltage across the second electrical device remains constant when the polarity of the first voltage across the first electrical device is reversed.

2. The system of claim 1 wherein the first electrical device is a reversible motor.

3. The system of claim 1 wherein the second electrical device is a position sensor.

4. The system of claim 1 wherein the first electrical device is a reversible motor and the second electrical device is a position sensor that is coupled to the motor.

5. The system of claim 4 wherein the position sensor is integrally coupled to the motor in a single package.

6. The system of claim 1 wherein the second electrical device comprises a third lead which is configured to provide the second voltage across the second electrical device and to transmit control signals.

7. The system of claim 1 wherein a plurality of diodes are used to maintain the polarity of the second voltage constant when the polarity of the first voltage is reversed.

8. The system of claim 1 wherein the polarity of the first voltage is reversible in response to user input.

9. The system of claim 1 wherein the first electrical device is a vehicle seat motor.

10. The system of claim 1 wherein the second electrical device uses the first lead or second lead as ground depending on the polarity of the first voltage.

11. A system comprising:

a first electrical device coupled to a voltage supply on a high side and to a ground on a low side, the high side and the low side being reversible; and

a second electrical device which is powered using constant polarity voltage and which uses the high side and/or the low side to provide the constant polarity voltage.

12. The system of claim 11 wherein the first electrical device is a reversible motor.

13. The system of claim 11 wherein the second electrical device is a position sensor.

14. The system of claim 11 wherein the second electrical device is coupled to the voltage supply on a high side which is also used to transmit control signals.

15. The system of claim 11 wherein a plurality of diodes are used to provide the constant polarity voltage using the high side and/or the low side.

16. The system of claim 11 wherein the reversible polarity voltage is reversed in response to user input.

17. The system of claim 11 wherein the second electrical device is coupled to the ground using the low side and is coupled to the voltage supply on a high side which is also used to transmit control signals to a controller.

18. The system of claim 11 wherein the second electrical device uses the high side or the low side as ground depending on the polarity of the first electrical device.

19. A direct current motor package comprising:

a sensor coupled to a motor;

a first lead; and

a second lead;

wherein the first lead and the second lead are coupled to a power controller, the power controller being used to reverse the polarity of the leads to provide reversible polarity power to the motor; and

wherein the first lead and/or the second lead is used to provide constant polarity power to the sensor.

20. The motor package of claim 19 wherein the motor comprises a housing, the sensor being positioned inside the housing.

21. The motor package of claim 19 wherein the sensor is a Hall Effect sensor, a potentiometer, or an optical sensor.

22. The motor package of claim 19 wherein the motor is configured to be used to adjust the position of an automotive device.

23. The motor package of claim 19 wherein the motor comprises a plurality of diodes that are configured to provide the constant polarity power to the sensor using the first lead and/or the second lead.

24. The motor package of claim 19 further comprising a third lead coupled to the sensor, the third lead being configured to provide the constant polarity power to the sensor and to transmit control signals.

25. The motor package of claim 19 wherein the sensor uses one of the first lead or second lead that is coupled to a ground and a third lead that is coupled to a voltage supply to provide the constant polarity power.

26. The motor package of claim 25 wherein the third lead is also used to transmit control signals.

27. The motor package of claim 19 wherein the sensor uses the first lead or second lead as ground depending on the polarity of motor.

28. A direct current motor package comprising:

a position sensor coupled to a motor;

wherein the motor is coupled to a voltage supply on a high side and is coupled to a ground on a low side, the high side and the low side being reversible to reverse a polarity of a voltage across the motor; and

wherein the position sensor is powered using constant polarity voltage and uses the high side and/or the low side to provide the constant polarity voltage.

29. The motor package of claim 28 wherein the position sensor is a Hall Effect sensor, a potentiometer, or an optical sensor.

30. The motor package of claim 28 wherein a power controller is used to control the polarity of the voltage across the motor.

31. The motor package of claim 28 wherein the motor comprises a housing, the position sensor being positioned inside the housing.

32. The motor package of claim 28 wherein a plurality of diodes are used to provide the constant polarity voltage using the high side and/or low side.

33. The motor package of claim 28 wherein the position sensor is coupled to the voltage supply on a high side which also is used to transmit control signals.

34. The motor package of claim 28 wherein the position sensor uses the high side or the low side as ground depending on the polarity of the motor.

35. A vehicle system comprising:

a direct current motor configured to adjust a position of a vehicle device;

a sensor configured to measure the position of the vehicle device; and

wherein the motor is coupled to a voltage supply on a high side and is coupled to a ground on a low side, the high side and the low side being reversible to reverse a polarity of a voltage across the motor; and

wherein the sensor is powered using constant polarity voltage and uses the high side and/or the low side to provide the constant polarity voltage.

36. The vehicle system of claim 35 further comprising:

a seat back; and

a seat base;

wherein the motor is configured to adjust the position of the seat back and/or seat base.

37. The vehicle system of claim 35 wherein the sensor is selected from a group consisting of a Hall Effect sensor and a potentiometer.

38. The vehicle system of claim 35 wherein the circuit further comprises a power controller configured to control the polarity of the voltage across the motor.

39. The vehicle system of claim 35 wherein the motor and the sensor are coupled together in an integral package.

40. The vehicle system of claim 35 wherein the sensor is coupled to the voltage supply on a high side which also is used to transmit control signals.

41. The vehicle system of claim 35 wherein a plurality of diodes are used to provide the constant polarity voltage using the high side and/or the low side.

42. The vehicle system of claim 35 wherein the sensor uses the high side or the low side as ground depending on the polarity of the motor.